

CLAIMS

It is claimed:

1. A method for making construction material comprising a decorative substantially flat
5 panel, said method comprising:
determining a desired amount of light to be passed by said flat panel ranging from
zero percent to eighty-five percent;
controlling construction of a wire mesh comprising a first plurality of wires and a
second plurality of wires to provide said desired amount of light to be passed by said flat
10 panel; and
mounting said wire mesh to said one or more plates of substantially transparent
material.
2. The method of claim 1 wherein said step of controlling comprises controlling at least
15 two of a group consisting of selecting a wire mesh weave, selecting twists in wires, selecting
a percentage of open regions of said wire mesh, selecting one or more cross-sectional shapes
for said first plurality of wires and said second plurality of wires, selecting a diameter of said
first plurality of wires, selecting a metal or alloy, and said second plurality of wires.

3. A method for making construction material comprising a decorative substantially flat panel, said method comprising:

determining a desired amount of light to be reflected by said flat panel ranging from fifteen percent to one hundred percent;

5 controlling construction of a wire mesh comprising a first plurality of wires and a second plurality of wires to provide said desired amount of light to be reflected by said flat panel; and

mounting said wire mesh to said one or more plates of substantially transparent material.

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4. The method of claim 3 wherein said step of controlling comprises controlling at least two of a group consisting of selecting a wire mesh weave, selecting twists in wires, selecting a percentage of open regions of said wire mesh, selecting one or more cross-sectional shapes for said first plurality of wires and said second plurality of wires, selecting a diameter of said
15 first plurality of wires and said second plurality of wires, selecting a texture of said first plurality of wires and said second plurality of wires, selecting a metal or alloy, and selecting a reflectance of said first plurality of wires and said second plurality of wires.

5. A decorative substantially flat construction assembly easily cleaned so as to be
20 suitable for use in hygienic environments, comprising:

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one or more layers of substantially transparent material with a smooth surface; and
a wire mesh mounted within said one or more layers of substantially transparent
material, said wire mesh comprising a first plurality of wires and a second plurality of wires,
said first plurality of wires being interwoven or knitted with said second plurality of wires,
5 said wire mesh having a total surface area, said wire mesh defining openings therein that
permit light through said wire mesh whereby a percentage of said openings with respect to
said total surface area of said wire mesh is in a range from zero to eighty-five percent.

6. The decorative construction assembly of claim 5, further comprising:

10 said first plurality of wires interconnecting with said second plurality of wires at a
plurality of intersections in at least one weave pattern, each of said plurality of intersections
comprising individual wires extending therefrom whereby said individual wires engage each
other but are not twisted around each other so as to loop around each other.

15 7. The decorative construction assembly of claim 5, further comprising a transparent
adhesive for securing said wire mesh within at least one first layer of substantially
transparent material and at least one second layer of substantially transparent material.

8. The decorative construction assembly of claim 5, wherein said wire mesh has a
20 lustrous surface.

9. The decorative construction assembly of claim 5, wherein said second plurality of wires have a cross-section with at least one planar side.
10. The decorative construction assembly of claim 5, wherein said first plurality of wires
5 or said second plurality of wires have a non-round cross-section.
11. The decorative construction assembly of claim 5, wherein said construction assembly forms a portion of a building wall.
- 10 12. The decorative construction material of claim 5, wherein said construction assembly forms a portion of an article of furniture.
13. The decorative construction assembly of claim 5, wherein said wire mesh is woven with a twilled weave or variation thereof.
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14. The decorative construction assembly of claim 5, wherein said wire mesh is woven in a Dutch weave or variation thereof.
15. The decorative construction assembly of claim 5, wherein said wire mesh is woven
20 in a heddle weave or variation thereof.

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16. The decorative construction assembly of claim 5, wherein said percentage of said openings with respect to said total surface area of said wire mesh is in a range of from zero to seventy percent.

5 17. The decorative construction assembly of claim 5, wherein said percentage of said openings with respect to said total surface area of said wire mesh is in a range of from zero to fifty percent.

18. The decorative construction assembly of claim 5, wherein said percentage of said
10 openings with respect to said total surface area of said wire mesh is in a range of from zero to forty percent.

19. The decorative construction assembly of claim 5, wherein said percentage of said
15 openings with respect to said total surface area of said wire mesh is in a range of from zero to twenty-five percent.

20. The decorative construction assembly of claim 5, wherein said percentage of said
openings with respect to said total surface area of said wire mesh is in a range of from zero
to ten percent.

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21. The decorative construction assembly of claim 5, wherein said one or more substantially transparent layers and said wire mesh are substantially flexible such that said decorative substantially flat construction assembly is bendable.

5 22. The decorative construction assembly of claim 5, wherein said wire mesh is welded together.

23. The decorative construction assembly of claim 5, wherein said wire mesh is not welded together.

24. A method for making a decorative substantially flat construction material, said method comprising:

combining a first plurality of planar wires with a second plurality of wires to form a wire mesh, providing that said wire mesh has between zero and eighty five percent open areas through said mesh;

mounting said wire mesh to said one or more substantially transparent panels; and securing said wire mesh to said plurality of substantially transparent panels.

25. The method of claim 24 wherein said step of affixing further comprises adhering said wire mesh within said one or more substantially transparent panels.

26. The method of claim 25 wherein said step of affixing further comprises fastening said wire mesh within said one or more substantially transparent panels with one or more fasteners.

27. The method of claim 24, further comprising:

providing that individual wires in said wire mesh intersect without looping completely around each other.

28. A method for construction, comprising:

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providing a wall portion affixed to a building structure and comprising a wire mesh embedded within one or more translucent panels, said wire mesh comprising a plurality of filaments with diameters and arrangement such that open area through said wire mesh comprises less than eighty-five percent of an overall area of said wire mesh; and

5 mounting said wall portion.

29. The method of claim 28, further comprising mounting said wall portion in furniture.

30. The method of claim 28, further comprising mounting said wall portion as a wall for
10 a building.

31. The method of claim 28, further comprising cutting said wire mesh into a desired pattern.

15 32. The method of claim 28, further comprising providing said wire meshed with a lustrous surface.

33. The method of claim 28, further comprising providing said wire filaments in a selected weave or knitted pattern.

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34. The method of claim 28, further comprising providing that said wire filaments are not welded together.

35. The method of claim 28, further comprising providing that said open area through
5 said wire mesh comprises less than fifty percent of an overall area of said wire mesh.

36. The method of claim 28, further comprising providing that said open area through said wire mesh comprises less than forty percent of an overall area of said wire mesh.

10 37. A decorative substantially flat construction assembly, comprising:
one or more panes of substantially transparent material; and
a substantially uniform metallic structure mounted therein therein with regularly spaced openings that permit light through said substantially uniform metallic structure whereby a percentage of said openings with respect to said total surface area of said
15 substantially uniform metallic structure is in a range from zero to forty percent.

38. The decorative substantially flat construction assembly of claim 37, wherein said one or more panes and said substantially uniform metallic structure is substantially flexible such
20 that said decorative substantially flat construction assembly is bendable.

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39. The decorative substantially flat construction assembly of claim 37, wherein said substantially uniform metallic structure comprises a stamped metallic plate mounted within said one or more panes of substantially transparent material.

5 40. The decorative substantially flat construction assembly of claim 37, wherein said substantially uniform metallic structure comprises a woven mesh within said one or more panes of substantially transparent material.

41. The decorative substantially flat construction assembly of claim 37, wherein said
10 substantially uniform metallic structure comprises a knitted mesh within said one or more panes of substantially transparent material.